A NEW LIMNOCORIS FROM MEXICO

(HEMIPTERA, NAUCORIDAE)

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Subfamily LIMNOCORINAE (Stål), 1876

Division Limnocoraria Stål, 1876, Enum. Hemipt. Pt. 5: 142.

Subfamily *Limnocorinae* Montandon, 1897, Boll. Mus. Zool. Anat. Univ. Torino 12 (297): 1; 1898, Verh. zool. bot. Ges. Wien 48: 413; Usinger, 1941, Ann. Ent. Soc. Amer. 34(1): 8; La Rivers, 1950, *ibid.* 43(3): 368.

Genus Limnocoris Stål, 1860

Limnocoris Stål, 1860, Konig. Svenska Veten.-Acad. Handl. 2(7):83; Montandon, 1897, Boll. Mus. Zool. Anat. Univ. Torino 12(297): 1; 1898, Verh. zool.-bot. Ges. Wien 48: 413; 1909, Bull. Soc. Sci. Buc.-Roum. 18(1): 49; 1910, ibid. 19(3):440; 1911, ibid. 19(6):1268; Champion, 1900, Biol. Centr.-Amer. Insecta 2: 358; De Carlo, 1941, Rev. Soc. Ent. Argentina 11(1): 37; 1951, Mis. Estud. Patalog. Reg. Argentina 22:41; La Rivers, 1950, Ann. Ent. Soc. Amer. 43(3):373.

Limnocoris pygmaeus, species novum (Fig. 1,b)

General appearance.—A small species, rivalling L. insularis Champion 1900 in size; 5.5-6.0 mm. long and 3.8-4.0 mm. wide; predominantly light colored dorsally, only eyes, scutellum and wing membranes showing as conspicuous darkened areas.

Head.—Light colored (yellowish) with suggestion of medial spotting particularly caudally; eyes convergent posteriorly; slightly but definitely elevated above the general head surface when viewed obliquely from behind; outer and posterior eye edges forming a blunt angle at their junctures; hind head margin weakly concave toward caudal end; external ridging of eyes distinctly thinned and flared out at anterior angle. Labrum as long as wide, parallel-sided for upper half and merging to a point at the tip; length-to-width ratio 23::25, pale yellow in color. Mouthparts darkening toward tip. Head ratios are: (1) Total length to width (including eyes) 78::140 (56%); (2) Anterior distance between eyes to posterior distance 87::70 (80%); (3) Anterior distance between eyes to inner eye length 87::56 (63%); (4) Posterior distance between eyes to greatest length of head posterior to this line 70::5 (7%).

Pronotum.—Lateral edges smoothly rounded, blunt-angulate anteriorly, rounded posteriorly; posterior margin rather wide, disc brownish, remainder of dorsum contrastingly yellowish; vague transverse rugosity behind head; percent of curvature of the pronotal sides, expressed as the ratio between the straightline distance between anterior and posterior lateral angles and the greatest vertical distance between this baseline and line of curvature, is 15% (102::15). Venter yellowish in lateral areas, darker in center; keel prominent, double-tipped anteriorly, the anterior tip lowest, blunt and rounded, the posterior tip higher, sharp, from which the keel is depressed abruptly down a sharp edge posteriorly, ending in an inverted "Y" fork. Prosternum-propleura fused, propleura gap-

ing medially, separated by the prominent keel; interno-posterior angles of propleura moderately elongated into short, stubby processes, like L. signoreti Montandon 1897. Pronotal ratios are: (1) Width between anterior angles to width between posterior angles $47::80 \ (60\%)$; (2) Median length to greatest width $48::80 \ (60\%)$; (3) Distance between anterior and posterior angles on same side to perpendicular distance between anterior angle and baseline of pronotum $35::38 \ (92\%)$.

Scutellum.—Dark centrally and anteriorly, lighter along postero-lateral margins; ratio of three sides, anterior and two laterals, 140::110::110.

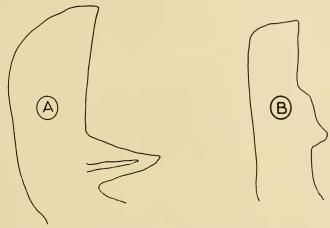


Fig. 1. Right lobe of the fifth male tergite, showing projecting tooth-like process: a, Limnocoris signoreti Montandon and b, L. pygmaeus La Rivers.

Hemelytra.—Yellowish in color over most of its area, wing membranes showing darker brown and weak spotting at postero internal emboliar margins and more internally. Embolium long and narrow, outwardly mildly inflated, this outer, curving surface constituting about 1/5th to 1/6th the total emboliar outline; length-to-width (latter measured at point of greatest inflation), 132::40 (30%). Inner emboliar crease prominent. Hemelytra fully attaining abdominal tip and moderately exposing the smooth, completely non-spinose lateral margins of the connexiva. Wings fully developed and functional, the hindwings as long as the hemelytra.

Venter.—The prothoracic venter has been discussed above. Meso- and meta-thoracic venter reddish brown, distinctly lighter than the dark brown abdomen. Connexival margins laterally striate-impressed, becoming very finely serrate posteriorly. Female subgenital plate undiagnostically similar in external tip outline to the larger L. signoreti (there is no indication, as yet, that this structure will be the valuable species indicator it is in Ambrysus). Thoracic foveae prominent, as in all limnocorines known to me, but specifically, undiagnostic; the meso- and meta-thoracic foveae well developed and functional; the former somewhat the larger and being preceded by a prominent, descending,

sharp ridge terminating in a rather pointed tubercle. Mid-ventral keel on abdominal segments I-II conspicuous, the portion occupying segment I being typically thin, knife-like and nearly transparent. Male genital process on caudal margin of tergite V, to the right of the median line is a poorly developed but distinct projection occupying about the same position as in the genus Ambrysus but pointing dorsally in normal position rather than posteriorly and laterad. The shapes of these structures, with present material, do not seem to be taxonomically important, although that of L. pygmacus is generally broader and less pointed than in L. signorcti (see fig. 1).

Legs.—Forelegs: Very typically those found in the genera Ambrusus and Pelocoris, among other naucorids, as well as in the remainder of Limnocoris; coxae yellowish, elongate; femora characteristically incrassate, ilattened, ratio of length-to-width $100::53\ (53\%)$; tibiae long, slender, curving to fit against the inner edge of femora when closed; tarsi fused imperceptibly into tibiae, forming the end of the latter, one-segmented.

Midlegs: Coxae-trochanters yellow-to-red, former prominent and glo'ular; femora long, whitish-yellow, flattened dorso-ventrally, rows of minute reddish spines along inner faces, ratio of length-to-width 100::18 (18%), length 1.4 mm.; tibiae long, narrow, more square in cross section, with conspicuous, but rather sparsely placed reddish spines particularly along front or leading edge—more plentifully equipped with long pilosity than are femora—spines more numerous at terminal apex, ratio of length-to-width 78::11 (14%), length 1.1 mm.; tarsi long, narrow, yellow-white, well-spined below and tipped with two rather weakly curved, amber claws—three segmented, the first segment small and basal.

Hindlegs: Larger facsimiles of the midlegs, femora more flattened, and tibiae proportionately more slender; femoral ratio of length-to-width 140::20 (14%), length 2.0 mm.; tibial ratio of length-to-width 132::15 (11%), length 2.0 mm.; tarsi similar to those of midlegs but longer.

Distribution.—See types.

Type locality data: MEXICO [438 kilometers south of Mexico City in the State of Guerrero, 1(xi)38, II. D. Thomas (UK)].

Location of types: Holotypic male, allotype and eight paratypes in the collection of the Snow Museum, University of Kansas at Lawrence; four paratypes in the collection of the writer, Reno. Nevada.

CULICOIDES GOETGHEBUERI, NOMEN NOVUM FOR CULICOIDES SETIGER GOETGHEBUER

In the preparation of a list of specific names employed in the genus Culicoides, which will be published soon, it was found that Culicoides setiger Goetghebuer, 1938, described from Belgium, is a primary homonym of Culicoides setiger Kieffer, 1910, described from India. The name Culicoides goetghebueri Arnaud, nomen novum, is proposed for Culicoides setiger Goetghebuer (1938, Bull. Ann. Soc. Ent. Belgique, 78:379-380) non Culicoides setiger Kieffer (1910, Mem. Indian Mus., 2:190-191).—Paul II. Arnaud, Natural History Museum, Stanford University, Calif.